



Energy at University of Richmond

How much energy does UR use?

University of Richmond purchases about 40.7 million kWh of electricity each year.



UR's annual electricity purchased could power 3,790 homes for a year

Last year, University of Richmond used a total of 481,256 MMBTUs of energy. This is the equivalent of 42,762.2 metric tonnes of carbon dioxide.



In order to offset these emissions, UR would need to plant about 2 million trees each year.

Climate Action Plan

The University has a Climate Action Plan, approved by the board in 2010, that iterates goals for the next several decades. We have committed to being carbon neutral by 2050. This means that UR will reduce its greenhouse gas emissions as much as possible, and offset the remainder through carbon sequestration. UR has an interim goal of reducing emissions 30% by 2020. To achieve this, the University also has goals to increase recycling to 80% by 2020 and increase sustainability literacy for all members of campus.

Tracking GHG Emissions

University of Richmond is committed to tracking greenhouse gas emissions every year. This allows progress to be monitored and key improvement areas to be identified. UR tracks emissions in three different categories: on campus combustion, purchased electricity, and other outside sources such as transportation and purchased paper. For more information on the most recent greenhouse gas emissions report, visit sustainability.richmond.edu

Energy Conservation

University of Richmond aims to reduce its energy use by purchasing more efficient equipment and educating people on ways to use less electricity. When buildings are renovated, they are designed to utilize the most advanced, energy efficient technologies.

To make these goals achievable, there is a green revolving fund, which is an allotment of money specifically for energy efficiency projects. Any saved costs resulting from the subsequent reduction in electric use is then put back into the fund to be used on more projects.

LEED

Leadership in Energy and Environmental Design (LEED) is a certification for buildings that examines how a building is constructed, from its materials used to its design, and how it operates after construction. LEED buildings are typically constructed using a significant amount of recycled materials, use energy efficient generators and cooling systems, and have proper insulation. University of Richmond is committed to having all new buildings certified LEED Silver or better. There are currently 10 LEED Certified buildings on campus, with four more buildings in the process of being certified.

Solar at UR

In Spring 2016, the University completed the installation of a 204.8 kW solar array located on the roof of the Weinstein Center for Recreation and Wellness. The array is composed of 749 panels covering about 22,000 square feet. Of the 749 panels, 569 are bifacial panels and 180 are monofacial panels. UR is the first place in the Americas that has installed bifacial panels and this solar array is acting as an experiment in which the two kinds of panels are monitored to see whether or not the more expensive bifacial panels produce a sufficiently larger amount of energy.

This solar array will generate an estimated 247,000 kWh of electricity each year, which is roughly enough to power 22 homes. The array will offset 364,000 pounds of carbon dioxide annually.

The solar array was installed under a Power Purchase Agreement (PPA), representing the first time this financial arrangement was made at a

What is a watt?

Watt - The unit used to express the rate at which power is consumed

1 Kilowatt - 1,000 watts

1 Kilowatt hour - A quantity of energy equivalent to a power consumption of 1,000 watts, or 1 kilowatt, for 1 hour

For example, if you use 20 kilowatts for 2 hours, you will use 40 kilowatt hours total.

university in the state of Virginia. Under the PPA, University of Richmond buys energy produced by the array from Secure Futures, the owner of the project, at an annual flat rate. The purchase of the energy also comes with the subsequent Renewable Energy Credits that go towards the University's goal of carbon neutrality by 2050.

What You Can Do



Use smart lighting habits

- Always turn off all lights when a room is unoccupied
- Use natural light as much as possible
- Use compact fluorescent (CFL) or light-emitting diode (LED) bulbs



Recycle whatever you can

- It uses far less energy to produce some things from recycled materials than to extract new materials
- Recycle glass, aluminum, cardboard, mixed paper, and plastics 1-7 on campus
- All recyclables should be empty, with minimal food debris or liquid inside



Power down electronics

- Use automatic sleep and power-saving modes for electronics
- Even when a device is turned off, it may still be drawing energy from an outlet. Plug devices into a power strip and turn off the strip when devices are not in use.
- When leaving for breaks, unplug TVs, computers, and power strips.



Change your thermostat settings

- Bump your thermostat up a couple degrees in the summer and down a couple in the winter. Adjust by five more degrees when leaving for the day.



Leave the car at home

- Commute with RideFinders
- Take the UR shuttle
- Get your free GRTC bus pass
- Grab a bike through the campus bike share program



Get involved on campus

- Become a Sustainability Advocate through URSA
- Join Green UR
- Become a part of Greeks Going Green
- Get your room Green Certified to show you use sustainable habits
- Take a sustainability course
- Educate your peers about sustainability issues and what they can do